Where is the SVRP Aquifer located?

The SVRP Aquifer begins in Idaho between Spirit Lake and the south end of Lake Pend Oreille. The Aquifer water flows south until it reaches the middle of the Rathdrum Prairie, then it turns west and flows in to Washington under the Spokane Valley. When the Aquifer water reaches downtown Spokane, most of it turns north, flows beneath the city and discharges into the Little Spokane River. Idaho cities located over the aquifer include: Spirit Lake, Athol, Rathdrum, Hauser Lake, Hayden, Hayden Lake, Dalton Gardens, Coeur d'Alene, Huetter, Post Falls, and Stateline. Washington cities include: Liberty Lake, Millwood, Spokane Valley, and city of Spokane.

Would you like to be involved?

Would you like more information on the study?

If so, check out the links below:

www.idwr.state.id.us/hydrologic/projects/svrp/

http://wa.water.usgs.gov/projects/svrp

For More Information, please contact:

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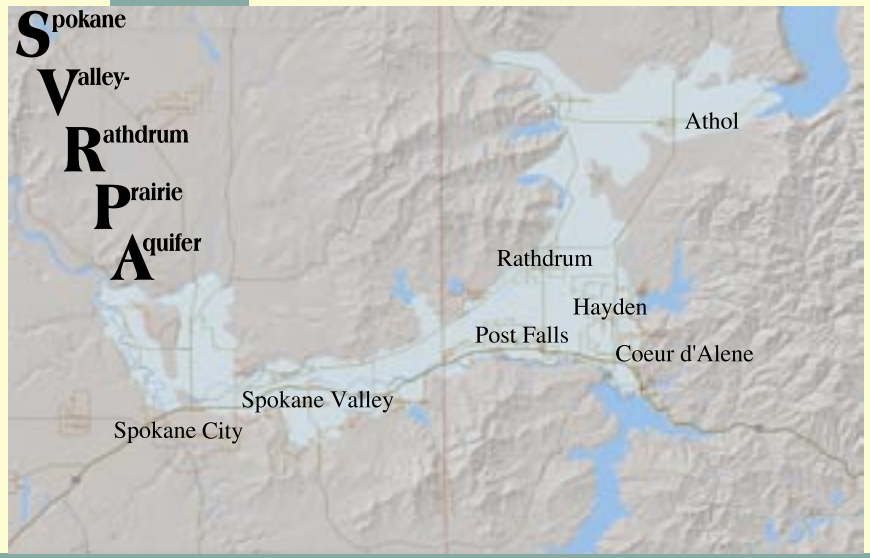
THE Spokane Valley-Rathdrum Prairie Aquifer STUDY

What is the SVRP Aquifer?

The SVRP Aquifer is a sand, gravel, cobble and boulder filled (sediment) series of connected valleys that contain large quantities of water. The ground water reservoir, or Aquifer, supplies high quality drinking water to nearly 500,000 people in Kootenai County of Northern Idaho and throughout the Spokane and Spokane Valley area. The sediment that fills the valleys was deposited during the last ice age by a series of catastrophic oods originating from the ancient Glacial Lake Missoula. The Aquifer continually receives new water from the lakes, streams and rivers within and near the Aquifer boundaries, as well as from precipitation that falls on the surface and infiltrates to the aquifer. Water is removed from the aquifer by pumping and through natural discharges to the Spokane River. Many interactions have taken place to form one of the purest sources of groundwater in America- The Spokane Valley-Rathdrum Prairie Aquifer.



Why Study this Resource?

The Spokane Valley/Rathdrum Prairie Aquifer Study is under way investigating the characteristics of the Aquifer. In 2002, obvious challenges arose when new water right requests were being made to withdraw millions of gallons of water a day out of the Aquifer. Community members and agencies alike were concerned about granting large water rights without regard for Aquifer sustainability. Therefore, a concerted effort between Washington, Idaho and the United States Geological Survey has been undertaken to determine quantity, quality, and recharge capability of the Aquifer. Refining the knowledge of the SVRP Aquifer through a collaborative study will create a common understanding of the system, which is essential to managing this valuable resource for everybody.

The Study: Purpose and Objectives

- **Aquifer Characterization–** Verify the thickness of the sediment, the geological boundaries, and determine water movement directions.
- **Hydrologic Data Collection–** Measurement of groundwater and surface water levels. Determine recharge sources and amounts.
- **Water Use**- Determine current water uses and withdrawals from the Aquifer and the Spokane River.
- **Water Quality**- Define current ground and surface water quality and characteristics.
- **Groundwater**- Surface water Interactions- Determine how seasonal changes affect the interaction of ground and surface water within the Aquifer boundaries. Delineate the gaining and losing reaches of the Spokane and Little Spokane rivers.
- **Numerical Model**- Using historical data and data collected from this study, create a model of the Aquifer and its ow and recharge capabilities.
- **Model Application**- Use the model to predict changes to the Aquifer based on proposed uses and withdrawals.
- **Public Involvement**- The information collected will be distributed to federal, state and local decision-makers and will be available to the public.